

# THE NATIONAL SECURITY IMPLICATIONS OF CLIMATE CHANGE: REDEFINING THREATS, BOLSTERING BUDGETS, AND MOBILIZING THE ARCTIC

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## INTRODUCTION

Climate change heightens national security threats for states, and in particular, changes the calculus for the world's superpower, the United States. The United States continues to be involved in myriad international conflicts: military operations in the Yemen; trade policy jousting with China; and an increasingly consequential Arctic becoming a new arena among Great Power competitors. The latter, once a barren region, is now occupied by more than nine countries including Russia, China and the United States. The accelerating rate of decline in Arctic sea ice, which has now reached 12.8 percent over each decade relative to the 1981-2010 average, has enabled more military and economic activity in the region.<sup>1</sup> In order to better understand the national security implications of climate change, three topics must be explored: (1) the changing definition of threats; (2) budget prescription and flexibility, and; (3) developing new approaches towards a changing Arctic.

Considering climate change a threat is essential in order to maintain a high level of combat readiness when the American military will be called upon to serve in a variety of roles. Increasingly, the military is used in humanitarian assistance and disaster relief roles whose importance will be compounded by the increased operational tempo due to the nature of climate change.<sup>2</sup> The military must maintain its level of readiness to address current and diverse challenges spanning counterinsurgency and stability operations, without losing sight of the necessary changes to win future wars. A budget that is explicit in addressing this tension is necessary. A new Arctic strategy needs to be integrated into the broader national security and defense strategies; otherwise the United States' overall security will be undermined by competition from rival states in the Arctic.

## REDEFINING THREATS

The traditional definition of a threat is a combination of two factors: a rival

actor's capability and intent.<sup>3</sup> Yet, this construct is only valid and applicable for modeling the behavior of traditional actors, such as states. When considering natural or environmental conditions such as climate change, however, threats must be understood from a wholistic perspective: *any* factor that has the capacity and ability to impede a state's objective may be threatening, regardless of intent. Under this broader construct of threat, non-state actors, such as climate, economic volatility, or even nationalist political trends present a threat to the United States. One recent example is the Budget Control Act of 2011, which, amid a backdrop of continuing resolutions, imposed sequestration and obstructed the United States from properly funding the military to meet global requirements to the point where the Secretary of Defense listed budget concerns as the number one threat to national security.<sup>4</sup> The National Defense Authorization Act of 2018 specifically stated,

Climate change is a direct threat to the national security of the United States and is impacting the stability in areas of the world both where the United States Armed Forces are operating today, and where strategic implications for future conflict exists.<sup>5</sup>

An event's potential negative impact on a nation's position, or perception of its position, is a more appropriate metric of a threat than the traditional model. Typically, national security threats are understood as competitive state actors with varying capacities that may span conventional, nuclear, and cyber domains, as well as non-state actors, which may adopt asymmetric strategies. Recent examples of the latter include non-state or proto-state terrorists such as the Islamic State of Iraq and the Levant (ISIS), Al-Qaeda, and the Taliban in the Middle East as well as transnational crime organizations such as the Sinaloa Cartel and Los Zetas, whose illicit activities and businesses undermine or subvert legitimate businesses and governments. As the flow of refugees and immigration from uninhabitable fragile states increases under climate change, overpopulated areas will become fertile ground for non-state actors to destabilize governments. This instability may provide fodder for terrorist organizations, which are adept at exploiting instability to recruit foot soldiers for extremist causes.<sup>6</sup>

Beginning in 2006, the Office of the Director of National Intelligence has submitted to the Senate Select Committee on Intelligence the *Worldwide Threat Assessment*. Unlike other national security documents, this report is influenced less by political agendas and paints a clear picture of yearly security trends. This document summarizes the intelligence community's estimate of both current and future conflicts as they evolve around the globe. Often the Director of National Intelligence's testimony may contradict an administration's official view of current threats, as was recently seen in the debate between former DNI Dan Coates and President Trump with regards to ISIS.<sup>7</sup> Thus, the constant tug and pull between the

executive and legislative branch will continue to exist, with congressional hearings critiquing executive policies and funding mechanisms in tension with executive orders.

A 2016 report summarized six possible ways in which climate change would impact national security: threats to the stability of countries, heightened social and political tensions, adverse effects on food prices and availability, increased risks to human health, negative impacts on investments and economic competitiveness, and potential climate discontinuities and secondary surprises.<sup>8</sup> Even more concerning, though, is the ongoing upward trend in extreme weather events which are likely to spur these long-term climate-related disruptions. In the short-term, the occurrence of resource scarcity such as water shortages is already becoming more prevalent. Looking forward 20 years, the proliferation of extreme weather events will lead to systemic changes such as a rise in sea levels.

Over the past three years climate change has been explicitly identified in national security assessments as a long-term threat to security. A notable observation in this year's analysis is that "the global environmental and ecological degradation, as well as climate change, are likely to fuel competition for resources, economic distress, and social discontent through 2019 and beyond."<sup>9</sup> In 2018, references to the linkage of air quality and public discontent was explicit: "The impacts of the long-term trends toward a warming climate, more air pollution, biodiversity loss, and water scarcity are likely to fuel economic and social discontent—and possibly upheaval—through 2018."<sup>10</sup> This assessment followed events in the prior year, particularly protests in Asia which rejected government policies that reduced quality of life.

Public dissatisfaction with air quality might drive protests against authorities, such as those seen in recent years in China, India, and Iran. Heightened tensions over shared water resources are likely in some regions. The dispute between Egypt and Ethiopia over the construction of the massive Grand Ethiopian Renaissance Dam (GERD) on the Nile is likely to intensify because Ethiopia plans to begin filling the reservoir in 2017.<sup>11</sup>

The impending threat of climate-driven civil unrest, or even outright conflict, is plausible, particularly in the Middle East and Africa.<sup>12</sup> A Department of Defense report specifically named the Chad Basin and Tanzania as priorities for military-to-military defense environmental international cooperation program candidates.<sup>13</sup> Climate change will affect smaller, poorer countries most drastically.<sup>14</sup> As a result, the United States will be forced to respond to allies with both aid and relying on military partnerships for humanitarian missions. Domestically, both states and the federal government have to consider the how adverse climate events such as wildfires will be exacerbated by climate change.<sup>15</sup>

## BOLSTERING BUDGETS

The increasing frequency and intensity of major storms has caused direct material and economic damage to the armed forces: following Hurricane Michael in October 2018 alone, Offutt Air Force Base required \$5 billion in repairs.<sup>16</sup> Even with \$750 billion in funding, the U.S. defense budget fails to adequately address the costs of climate change. Climate change threatens not only military material, but also training areas and infrastructure. Military bases, particularly those Army bases that support large amounts of armored and tracked vehicles in the coastal states of Georgia, Mississippi, and North Carolina, are under threat. Extreme weather also prevents the requisite conditions for training, which in turn leaves the military unable to adequately maintain readiness levels in preparation of conflict. Counteracting these effects will require significant, dedicated resources. While the current defense budget is nominally intended to modernize the force, it does not adequately address the threat of climate change on equipment even though it upgrades unit-by-unit readiness and increases force size and structure.<sup>17</sup> Budgets, by their nature, signal the priorities of an administration. The allocation of resources into narrow areas, such as the Obama administration's "Pivot to Asia" or the Trump administration's investment to update the nuclear triad illustrate the limited focuses of each national security strategy.<sup>18,19</sup> Elevating climate change to the level of a national security threat is essential to maintaining high combat readiness in an increasingly-complex world, where the U.S. military will be called upon continually to serve in climate-driven conflicts. Budget debates are focused on fifth generation fighter jets and upgrading the nuclear triad, but neither will matter if the United States does not have capacity to project power or maintain basic security in a world made unstable by the climate.

The Department of Defense budget, as assessed by the Chief Comptroller, actually showed a decrease in infrastructure spending from fiscal years 2018 to 2019, from \$7.2 billion to \$6.4 billion. In the fiscal year 2020 the figure requested rose \$8.8 billion.<sup>20</sup> This lack of consistency in recent years is indicative of infrastructure's low priority at the Pentagon. With climate change accelerating, both proposed and accepted budgets should reflect the reality of the threat to infrastructure within the Department of Defense.

In January of 2019, the Department of Defense conducted a report on the impact of climate change across 79 military installations with a focus on the five following events: recurrent flooding, drought, desertification, wildfires, and thawing permafrost.<sup>21</sup> The report alarmingly concluded that over half of the surveyed military installations were vulnerable to current or future recurrent flooding and vulnerable to current or future droughts.

## MOBILIZING THE ARCTIC

With the Arctic becoming more habitable, it will become a place of geopolitical competition and power projection between both Arctic and near-Arctic nations. The Coast Guard's responsibilities in the Arctic are to ensure "the homeland security, safety, and environmental stewardship of U.S. waters."<sup>22</sup> The essence of the Coast Guard's strategy is founded on three main pillars: enhancing its capability to operate in such a dynamic environment; strengthening and enforcing the international rules-based order; and innovating and adapting through the promotion of resilience and prosperity. In terms of the Arctic, the Coast Guard hangs its hat on 'upholding sovereignty' as the central component of its arctic vision.<sup>23</sup>

China and Russia have both identified the Arctic as a strategic priority, and have consequently invested in their capabilities and capacities to exert influence.<sup>24</sup> China's extraterritorial claims, mobilization of synthetic islands, and its economic interests in controlling access to trade routes and resources may all contribute to future confrontation.<sup>25</sup> Recognizing the reality of global warming, China is developing its Polar Silk Road with a strengthened policy towards the Arctic region.<sup>26</sup> Russia, meanwhile, has established its Arctic Command, the Northern Fleet Joint Strategic Command, stationing surface-to-air missile capabilities in the region and improving or creating from scratch multiple deep-water ports and airfields to project power in the region.<sup>27</sup>

One question to consider is whether the Coast Guard is granted authority and support to operate under the Department of Defense due to Title X in order to bolster American capabilities in the region. While such a move would dramatically change the nature of the Coast Guard and its operations elsewhere in the world, a regional cooperative structure is necessary and viable in the Arctic. There is precedent for congressional authority to transfer Title X authority during war time, as the Coast Guard demonstrated during World War One and World War Two.<sup>28</sup> The administrative complexity of centralized planning would be less costly than if the Coast Guard is called to respond to a conflict in the Arctic while coordinating across agencies on the fly. Additional benefits of such reconfiguration would be a more central command authority, more robust resources and budget, and flexibility in law enforcement responses.

Climate changes uniquely affects U.S. Northern Command, whose mission is protecting the homeland, and in particular Alaska and other northern territories, from potential state actors seeking to spy on, invade, or disrupt the United States.<sup>29</sup> Given their aspirations in the Arctic, Russia and China are the obvious regional competitors. Moreover, Russia has utilized much of the inhabitable area in the arctic as an opportunity to test tactical nuclear weapons at Novaya Zemlya in direct violation of the ratified Comprehensive Nuclear Test Ban Treaty.<sup>30</sup> The mere testing

of nuclear weapons opens the door for future testing by both China and the United States, and threatens to escalate the stakes for regional competition. While the unclassified *Project Iceworm* demonstrated that NATO, under American leadership, attempted to build a network of nuclear weapons facilities in Greenland, the project was eventually shuttered in 1966 due to its lack of feasibility.<sup>31</sup> Today, however, new technology may unlock the possibility of a nuclear Arctic. This August, Russia installed a nuclear power station in the Arctic, despite the concerns of activists over possible accidents with detrimental long-term environmental effects.<sup>32</sup>

## THE PATH FORWARD

The National Security Strategy and the National Defense Strategy are political documents that guide the administration in its view of the world, and of America's role in it. Each presidential administration must submit the report to Congress every year, unless a waiver is granted. In recent documents the Trump Administration has notably prioritized great power competition with China and Russia over terrorism, evidenced by changes in budget, resources and engagement.<sup>33</sup> Yet the Trump administration neglected to acknowledge climate change as a threat in the National Security Strategy.<sup>34</sup> This decision is problematic: by omitting particular threats that do not conform to a narrative, the administration constrains its own worldwide threat assessment. Without this perspective, proper budgeting for threats on the scale of global climate disruption, in turn, does not occur. Furthermore, this omission directly contradicts the national security strategies of prior administrations that recognized climate change as a threat to U.S. interests. Since 1991, during each presidential administration climate change has been mentioned in the national security strategy, and in most cases directly addressed. The "New Era" 1991 national security strategy of President George H.W. Bush noted, "global environmental concerns include such diverse but interrelated issues as stratospheric ozone depletion, climate change, food security, water supply, deforestation, biodiversity and treatment of waste. A common ingredient in each is that they respect no international boundaries."<sup>35</sup> Most recently, in the 2015 National Security Strategy, the Obama Administration described climate change as, "an urgent and growing threat to our national security, contributing to increased natural disasters, refugee flows, and conflicts over basic resources like food and water."<sup>36</sup> A realistic national security strategy must address climate change as an explicit threat.

The budget proposed by the president, and later legislatively codified in the yearly National Defense Authorization Act, is a reflection of both its "great power competition" strategy and the political balance among branches of government. To avoid these pitfalls in an increasingly complex threat environment, greater flexibility should be permitted in order to enable the Department of Defense to transfer and

reprogram funds more easily. The current reprogramming caps are at \$10 million for military personnel, \$20 million for operation and maintenance, \$20 million for procurement, and \$10 million for research, development, test, and evaluation.<sup>37</sup> These caps should be adjusted to a much higher level if the policy is to counter a clear and recognized danger, such as climate change. An example for reprogramming would include procuring new weatherproof covers for fighting vehicles that have been shown to be vulnerable.

Enabling a more flexible integration of the Coast Guard and the Navy deserves further consideration specifically for the security of the Arctic region. Linking the two above points enables the strategy such that when a climate-linked situation arises resources under the budget may be reassigned. A forward presence is required by the Coast Guard to uphold sovereignty. Greater displays of partnership with the Nordic countries are essential to compete against adversaries. Notwithstanding arctic considerations, other legitimate advantages of permanently transferring the Coast Guard to the Department of Defense exist.<sup>38</sup>

To conclude, the impact of climate change on national security for the United States requires defining the threat in strategic documents, budgeting for weather damage and degradation, and reconstituting an arctic strategy to meet this arena's changing dynamics across economic and military interests. Acknowledgement of these three tasks in the 2020 publication of the national security strategy is essential to demonstrate America's readiness to address not only traditional state actors in a multi-polar world, but also redefined threats such as the environment that are no less concerning. <sup>39</sup>

## NOTES

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